WHAT IS CLAIMED IS:

1. An inductive device comprising:

an organic core board having a core material;

a plurality of band-shaped conductor patterns formed on front and rear surfaces of said organic core board; and

bridging conductor patterns formed on cut surfaces of said organic core board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said organic core board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

2. An inductive device comprising:

an organic core board having a core material;

a plurality of band-shaped conductor patterns formed on front and rear surfaces of said organic core board;

electrically insulating layers formed on said front and rear surfaces of said organic core board so that said band-shaped conductor patterns are covered with said electrically insulating layers; and

bridging conductor patterns formed on cut surfaces of said organic core board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said organic core board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

3. An inductive device comprising:

a plurality of core boards;

a plurality of band-shaped conductor patterns formed on a surface of each of said core boards;

electrically insulating layers through which said plurality of core boards are integrally laminated to form a laminated board; and

bridging conductor patterns formed on cut surfaces of said laminated board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

4. An inductive device comprising:

a plurality of core boards;

a plurality of band-shaped conductor patterns formed on a surface of each of said core boards;

an electrically insulating layer formed on said surface of each of said core boards so that said band-shaped conductor patterns are covered with said electrically insulating layer;

adhesive layers through which said plurality of core boards are integrally laminated to form a laminated board; and

bridging conductor patterns formed on cut surfaces of said laminated board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

5. An inductive device according to any one of Claims 1 through 4, wherein a surface of each core board on which said band-shaped conductor patterns are formed is smooth.

6. An inductive device according to any one of Claims

1 through 4, wherein each core board and/or each electrically insulating layer is made of a vinyl benzyl resin or contains a vinyl benzyl resin.

7. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns on front and rear surfaces of a plurality of organic core boards each having a core material and integrally laminating said plurality of organic core boards through electrically insulating layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

8. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns and electrically insulating layers for covering said plurality of band-shaped conductor patterns on front and rear surfaces of a plurality of organic core boards each having a core material and integrally laminating said plurality of organic core boards through adhesive layers to form a laminated board (lamination

step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

9. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns on a surface of each of a plurality of core boards and integrally laminating said plurality of core boards through electrically insulating layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging

conductor patterns (separation step).

10. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns and an electrically insulating layer for covering said plurality of band-shaped conductor patterns on a surface of each of a plurality of core boards and integrally laminating said plurality of core boards through adhesive layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

11. A method of producing an inductive device according to any one of Claims 8 through 10, wherein each electrically insulating layer is polished to adjust the thickness of said inductive device.

12. A method of producing an inductive device according to Claim 9 or 10, wherein a surface of each core board on which said band-shaped conductor patterns are not provided is polished to adjust the thickness of said inductive device.

13 A method of producing an inductive device according to any one of Claims 7 through 10, wherein said cut surfaces of said laminated sliced bodies after the slicing step are polished to adjust the thickness of said inductive device.

14. A method of producing an inductive device according to any one of Claims 7 through 10, wherein said band-shaped conductor patterns are provided on each organic core board having said core material or on each core board by means of transferring.

15. An inductive device comprising:

an inorganic sintered core board;

a plurality of band-shaped conductor patterns formed on front and rear surfaces of said inorganic sintered core board; and

bridging conductor patterns formed on cut surfaces of said inorganic sintered core board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said inorganic sintered core board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

16. An inductive device comprising:

an inorganic sintered core board;

a plurality of band-shaped conductor patterns formed on front and rear surfaces of said inorganic sintered core board;

electrically insulating layers formed on said front and rear surfaces of said inorganic sintered core board so that said band-shaped conductor patterns are covered with said electrically insulating layers; and

bridging conductor patterns formed on cut surfaces of said

inorganic sintered core board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said inorganic sintered core board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

17. An inductive device comprising:

a plurality of inorganic sintered core boards;

a plurality of band-shaped conductor patterns formed on a surface of each of said inorganic sintered core boards;

electrically insulating layers through which said plurality of inorganic sintered core boards are integrally laminated to form a laminated board; and

bridging conductor patterns formed on cut surfaces of said laminated board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

18. An inductive device comprising:

a plurality of inorganic sintered core boards;

a plurality of band-shaped conductor patterns formed on a surface of each of said inorganic sintered core boards;

an electrically insulating layer formed on said surface of each of said inorganic sintered core boards so that said band-shaped conductor patterns are covered with said electrically insulating layer;

adhesive layers through which said plurality of inorganic sintered core boards are integrally laminated to form a laminated board; and

bridging conductor patterns formed on cut surfaces of said laminated board sliced transversely with respect to said band-shaped conductor patterns so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated board are connected to one another by said bridging conductor patterns to thereby provide at least one helical coil.

19. An inductive device according to any one of Claims 15 through 18, wherein a surface of each inorganic sintered core board on which said band-shaped conductor patterns are formed is smooth.

20. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns on front and rear surfaces of a plurality of inorganic sintered core boards and integrally laminating said plurality of inorganic sintered core boards through electrically insulating layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

21. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns and electrically insulating layers for covering said plurality of band-shaped conductor patterns on front and rear surfaces of a plurality of inorganic sintered core boards and integrally laminating said plurality of inorganic sintered core boards through adhesive layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

22. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns on a surface of each of a plurality of inorganic sintered core boards and integrally laminating said plurality of inorganic sintered core boards through electrically insulating layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor

patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

23. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns and an electrically insulating layer for covering said plurality of band-shaped conductor patterns on a surface of each of a plurality of inorganic sintered core boards and integrally laminating said plurality of inorganic sintered core boards through adhesive layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging

conductor patterns (separation step).

24. A method of producing an inductive device, comprising the steps of:

forming a plurality of band-shaped conductor patterns on rear and front surfaces of organic core boards each having a core material and integrally laminating said organic core boards and inorganic sintered core boards alternately through electrically insulating adhesive layers to form a laminated board (lamination step);

slicing said laminated board obtained in the lamination step transversely with respect to said band-shaped conductor patterns to thereby form laminated sliced bodies (slicing step);

forming bridging conductor patterns on cut surfaces of each laminated sliced body obtained in the slicing step so that exposed end portions of said band-shaped conductor patterns on each of said cut surfaces of said laminated sliced body are connected to one another by said bridging conductor patterns (bridging conductor formation step); and

separating each laminated sliced body into individual chips so that each chip includes at least one helical coil formed from said band-shaped conductor patterns and said bridging conductor patterns (separation step).

25. A method of producing an inductive device according to any one of Claims 20 through 24, wherein each electrically insulating layer is polished to adjust the thickness of said inductive device.

26. A method of producing an inductive device according to Claim 22 or 23, wherein a surface of each inorganic sintered core board on which said band-shaped conductor patterns are not provided is polished to adjust the thickness of said inductive

device.

27. A method of producing an inductive device according to any one of Claims 20 through 24, wherein said cut surfaces of said laminated sliced bodies after the slicing step are polished to adjust the thickness of said inductive device.

28. A method of producing an inductive device according to any one of Claims 20 through 24, wherein an inorganic sintered body used in each inorganic sintered core board is made of a porous ceramic substance.

29. A method of producing an inductive device according to any one of Claims 20 through 24, wherein an inorganic sintered body used in each inorganic sintered core board is made of a magnetic substance.